NATIONAL WEATHER SERVICE
PRODUCT DESCRIPTION DOCUMENT (PDD)
TYPE: Official Product
DATE: August 13, 2003

TAKE OFF FORECAST

Part 1 - Mission Connection

1. **Product/Service Description:**
   The Take Off Forecast is a text product produced by an automated program that is then edited and/or augmented by Forecasters or Hydro-Meteorological Technicians (HMTs). The automated program uses FRH model data output for pressure, the Terminal Aerodrome Forecast (TAF) for winds, and the Aviation Model Output Statistics (MAV) for temps and comes up in an editable display with the last 6 hours of obs displayed. The forecast includes an hour by hour prediction of the winds, temps, altimeter setting, and, sometimes, a forecast of wet or dry runway conditions expected on the airport within a 6 hour period from the time of issuance. Forecasts are updated every 6 hours.

2. **Product Type:** Operational

3. **Purpose/Intended Use:**
   The Take Off Forecast augments TAFs produced for these airports by providing information about temperature, altimeter, and runway conditions that are not forecasted in the TAF. Knowledge about temperature, altimeter, and winds help airlines determine how much weight and fuel they can carry safely and how much of a runway they will need to take off. Although wind forecasts are provided in the TAFs, restating the forecasted winds in the Take Off Forecast product gives the airlines all the pieces of information they need to initiate safe take off procedures. Ultimately, the purpose of the Take Off Forecast is to ensure airplanes have the information they need to operate safely.

4. **Audience:**
   The main audience is the airlines. However, the Take Off Forecast is available through the Internet for other airport users to access.

5. **Presentation Format:**
   Currently there is one format available for the Take Off Forecast and that is the text product. The text format provides an hour by hour forecast of wind, altimeter, and temperatures.

6. **Feedback Method:**
   Most feedback comes from the airlines in direct discussions with WFO personnel. Feedback may also be provided by mail:

   Kristine Nelson
   National Weather Service
   125 S. State, room #1311
   Salt Lake City, UT 84138

E-mail comments or questions can be sent to Kristine.A.Nelson@noaa.gov

7. **Example/URL:** `http://www.nwsla.noaa.gov/takeoff.html`

Part 2 - Technical

1. **Format and Science Basis:**
   This product was developed because temperatures and altimeter levels are not included in the TAF product for airports. The Take Off product attempts to address that void. The automated program uses FRH model data output for pressure, the Terminal Aerodrome Forecast (TAF) for winds, and the Aviation Model Output Statistics (MAV) for temps and comes up in an editable display with the last 6 hours of obs displayed.

2. **Availability:**
   The Take Off Forecast is produced every 6 hours. The product may be updated if, in the forecaster's judgement, an update is needed.

3. **Additional Information:**
   This product is only available on the Internet.